

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,327ADATE: 03/07/2000
TIME: 13:27:41

Input Set: I155327A.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

Does Not Comply
Corrected Diskette Needed

1 <110> APPLICANT: AMRAD Operations Pty Ltd
 2 <120> TITLE OF INVENTION: A NOVEL MAMMALIAN GENE, bcl-2, BELONGS TO THE bcl-2
 3 FAMILY OF APOPTOSIS-CONTROLLING GENES
 4 <130> FILE REFERENCE: 2096584
 5 <140> CURRENT APPLICATION NUMBER: US/09/155,327A
 6 <141> CURRENT FILING DATE: 1999-03-29
 7 <150> EARLIER APPLICATION NUMBER: PN8965
 8 <151> EARLIER FILING DATE: 1996-03-27
 9 <160> NUMBER OF SEQ ID NOS: 9
 10 <170> SOFTWARE: PatentIn Ver. 2.1
 11 <210> SEQ ID NO 1
 12 <211> LENGTH: 33
 13 <212> TYPE: DNA
 14 <213> ORGANISM: Mouse
 15 <220> FEATURE:
 16 <221> NAME/KEY: modified_base
 17 <222> LOCATION: 16
 18 <223> OTHER INFORMATION: r is inosine
 19 <220> FEATURE:
 20 <221> NAME/KEY: modified_base
 21 <222> LOCATION: 19
 22 <223> OTHER INFORMATION: r is inosine
 23 <220> FEATURE:
 24 <221> NAME/KEY: modified_base
 25 <222> LOCATION: 22
 26 <223> OTHER INFORMATION: r is inosine
 27 <220> FEATURE:
 28 <221> NAME/KEY: modified_base
 29 <222> LOCATION: 25
 30 <223> OTHER INFORMATION: r is inosine
 31 <400> SEQUENCE: 1
 32 gctctagaac tggggrrngtr tggtrgcctt ytt
 33 <210> SEQ ID NO 2
 34 <211> LENGTH: 9
 35 <212> TYPE: PRT
 36 <213> ORGANISM: Mouse
 37 <220> FEATURE:
 38 <221> NAME/KEY: Unsure
 39 <222> LOCATION: 5
 40 <223> OTHER INFORMATION: Xaa is Ile or Val
 41 <400> SEQUENCE: 2
 42 Asn Trp Gly Arg Xaa Val Ala Phe Phe
 43 1 5
 44 <210> SEQ ID NO 3

*unavail - per sequence
 Rebs, r can only
 represent a or g; instead,
 use N and explain in
 <220> - <223> section*

RECEIVED
 MAR 20 2000
 33
 TC 1600 MAIL ROOM

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,327ADATE: 03/07/2000
TIME: 13:27:41

Input Set: I155327A.RAW

45 <211> LENGTH: 31
 46 <212> TYPE: DNA
 47 <213> ORGANISM: Mouse
 48 <220> FEATURE:
 49 <221> NAME/KEY: modified_base
 50 <222> LOCATION: 14
 51 <223> OTHER INFORMATION: r is inosine
 52 <220> FEATURE:
 53 <221> NAME/KEY: modified_base
 54 <222> LOCATION: 17
 55 <223> OTHER INFORMATION: r is inosine
 56 <220> FEATURE:
 57 <221> NAME/KEY: modified_base
 58 <222> LOCATION: 20
 59 <223> OTHER INFORMATION: r is inosine
 60 <400> SEQUENCE: 3
 61 ggaattccca gcc~~cc~~at~~t~~ tcttggatcc a 31
 62 <210> SEQ ID NO 4
 63 <211> LENGTH: 8
 64 <212> TYPE: PRT
 65 <213> ORGANISM: Mouse
 66 <220> FEATURE:
 67 <221> NAME/KEY: Unsure
 68 <222> LOCATION: 4
 69 <223> OTHER INFORMATION: Xaa is Asp or Glu
 70 <220> FEATURE:
 71 <221> NAME/KEY: Unsure
 72 <222> LOCATION: 5
 73 <223> OTHER INFORMATION: Xaa is Asn or Gln
 74 <400> SEQUENCE: 4
 75 Trp Ile Gln Xaa Xaa Gly Gly Trp
 76 1 5
 77 <210> SEQ ID NO 5
 78 <211> LENGTH: 14
 79 <212> TYPE: PRT
 80 <213> ORGANISM: Mouse
 81 <400> SEQUENCE: 5
 82 Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val
 83 1 5 10
 84 <210> SEQ ID NO 6
 85 <211> LENGTH: 583
 86 <212> TYPE: DNA
 87 <213> ORGANISM: HUMAN
 88 <220> FEATURE:
 89 <221> NAME/KEY: CDS
 90 <222> LOCATION: (1)..(579)
 91 <400> SEQUENCE: 6
 92 atg gcg acc cca gcc tcg gcc cca gac aca cgg gct ctg gtg gca gac 48
 93 Met Ala Thr Pro Ala Ser Ala Pro Asp Thr Arg Ala Leu Val Ala Asp
 94 1 5 10 15

sample error

w-->OK

TC 1600 MAIL ROOM

RECEIVED

MAR 20 2000

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,327ADATE: 03/07/2000
TIME: 13:27:41

Input Set: I155327A.RAW

95 ttt gta ggt tat aag ctg agg cag aag ggt tat gtc tgt gga gct ggc 96
 96 Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
 97 20 25 30
 98 ccc ggg gag ggc cca gca gct gac ccg ctg cac caa gcc atg cgg gca 144
 99 Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
 100 35 40 45
 101 gct gga gat gag ttc gag acc cgc ttc cgg cgc acc ttc tct gat ctg 192
 102 Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
 103 50 55 60
 104 gcg gct cag ctg cat gtg acc cca ggc tca gcc cag caa cgc ttc acc 240
 105 Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 106 65 70 75 80
 107 cag gtc tcc gac gaa ctt ttt caa ggg ggc ccc aac tgg ggc cgc ctt 288
 108 Gln Val Ser Asp Glu Leu Phe Gln Gly Pro Asn Trp Gly Arg Leu
 109 85 90 95
 110 gta gcc ttc ttt ctc ttt ggg gct gca ctg tgt gct gag agt gtc aac 336
 111 Val Ala Phe Phe Leu Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
 112 100 105 110
 113 aag gag atg gaa cca ctg gtg gga caa gtg cag gag tgg atg gtg gcc 384
 114 Lys Glu Met Glu Pro Leu Val Gly Gln Val Glu Trp Met Val Ala
 115 115 120 125
 116 tac ctg gag acg cgg ctg gtc gac tgg atc cac agc agt ggg ggc tgg 432
 117 Tyr Leu Glu Thr Arg Leu Val Asp Trp Ile His Ser Ser Gly Gly Trp
 118 130 135 140
 119 gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gcg cgg 480
 120 Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
 121 145 150 155 160
 122 cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg 528
 123 Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
 124 165 170 175
 125 gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc 576
 126 Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
 127 180 185 190
 128 aag tgaa 583
 129 Lys
 130 <210> SEQ ID NO 7
 131 <211> LENGTH: 193
 132 <212> TYPE: PRT
 133 <213> ORGANISM: HUMAN
 134 <400> SEQUENCE: 7
 Met Ala Thr Pro Ala Ser Ala Pro Asp Thr Arg Ala Leu Val Ala Asp
 135 1 5 10 15
 136 Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
 137 20 25 30
 138 Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
 139 35 40 45
 140 Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
 141 50 55 60
 142 Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 143 65 70 75 80
 144

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,327ADATE: 03/07/2000
TIME: 13:27:41

Input Set: I155327A.RAW

145 Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
 146 85 90 95
 147 Val Ala Phe Phe Leu Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
 148 100 105 110
 149 Lys Glu Met Glu Pro Leu Val Gly Gln Val Glu Trp Met Val Ala
 150 115 120 125
 151 Tyr Leu Glu Thr Arg Leu Val Asp Trp Ile His Ser Ser Gly Gly Trp
 152 130 135 140
 153 Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
 154 145 150 155 160
 155 Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
 156 165 170 175
 157 Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
 158 180 185 190
 159 Lys
 160 <210> SEQ ID NO 8
 161 <211> LENGTH: 581
 162 <212> TYPE: DNA
 163 <213> ORGANISM: Mouse
 164 <220> FEATURE:
 165 <221> NAME/KEY: CDS
 166 <222> LOCATION: (1)...(579)
 167 <400> SEQUENCE: 8 48
 atg ccg acc cca gcc tca acc cca gac aca cgc gct cta gtg gct gac
 168 Met Pro Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
 169 1 5 10 15
 170 ttt gta ggc tat agg ctg agg cag aag ggt tat gtc tgt gga gct ggg 96
 171 Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
 172 20 25 30
 173 cct ggg gaa ggc cca gcc gac ccg ctg cac caa gcc atg cgg gct 144
 174 Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
 175 35 40 45
 176 gct gga gac gag ttt gag acc cgt ttc cgc cgc acc ttc tct gac ctg 192
 177 Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
 178 50 55 60
 179 gcc gct cag cta cac gtg acc cca ggc tca gcc cag caa cgc ttc acc 240
 180 Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 181 65 70 75 80
 182 cag gtt tcc gac gaa ctt ttc caa ggg ggc cct aac tgg ggc cgt ctt 288
 183 Gln Val Ser Asp Glu Leu Phe Gln Gly Pro Asn Trp Gly Arg Leu
 184 85 90 95
 185 gtg gca ttc ttt gtc ttt ggg gct gcc ctg tgt gct gag agt gtc aac 336
 186 Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
 187 100 105 110
 188 aaa gaa atg gag cct ttg gtg gga caa gtc cag gat tgg atc gtg gcc 384
 189 Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Ile Val Ala
 190 115 120 125
 191 tac ctg gag aca cgt ctg gct gac tgg atc cac agc agt ggc ggc tgg 432
 192 Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
 193 130 135 140
 194

PAGE : 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,327A

DATE: 03/07/2000
TIME: 13:27:41

Input Set: I155327A.RAW

```

195      gcg gac ttc aca gct cta tac ggg gac ggg gcc ctg gag gac gca cg 480
196      Ala Asp Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Asp Ala Arg
197      145          150          155          160          528
198      cgt ctg cgg gag ggc aac tgg gca tga gtg agc aca gtg gtg acg ggg
199      Arg Leu Arg Glu Gly Asn Trp Ala Val Ser Thr Val Val Thr Gly Ala
200      165          170          175
201      gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc
202      Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser Lys
203      180          185          190
204      aag tg
205      <210> SEQ ID NO 9
206      <211> LENGTH: 192
207      <212> TYPE: PRT
208      <213> ORGANISM: Mouse
209      <400> SEQUENCE: 9
210      Met Pro Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
211      1          5          10          15
212      Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
213      20          25          30
214      Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
215      35          40          45
216      Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
217      50          55          60
218      Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
219      65          70          75          80
220      Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
221      85          90          95
222      Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
223      100         105         110
224      Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Ile Val Ala
225      115         120         125
226      Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
227      130         135         140
228      Ala Asp Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Asp Ala Arg
229      145         150         155         160
230      Arg Leu Arg Glu Gly Asn Trp Ala Val Ser Thr Val Val Thr Gly
231      165         170         175
232      Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
233      180         185         190
234      Lys

```

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/155,327A

DATE: 03/07/2000
TIME: 13:27:41

Input Set: I155327A.RAW

Line ? Error/Warning

Original Text

42 W "N" or "Xaa" used: Feature required
75 W "N" or "Xaa" used: Feature required

Asn Trp Gly Arg Xaa Val Ala Phe Phe
Trp Ile Gln Xaa Xaa Gly Gly Trp